

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	33	("lithium niobate" or linbo3) and euler adj1 angles\$1	USPAT	2007/08/28 14:41	
2	BRS	L2	14	("lithium niobate" or linbo3) and euler adj1 angles\$1	US-PGPUB	2007/08/28 14:54	
3	BRS	L3	5	("lithium niobate" or linbo3) and euler adj1 angles\$1	USOCR; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/28 15:11	
4	BRS	L4	0	("lithium niobate" or linbo3) and stonely	USOCR; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/28 15:11	
5	BRS	L5	10	("lithium niobate" or linbo3) and stonely	US-PGPUB; USPAT	2007/08/28 15:15	
6	BRS	L6	292	("lithium niobate" or linbo3) and "acoustic velocity"	US-PGPUB; USPAT	2007/08/28 15:31	
7	BRS	L7	12	("lithium niobate" or linbo3) and "acoustic velocity" and euler	US-PGPUB; USPAT	2007/08/28 15:31	

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
8	BRS	L8	10459 91	stoneley wave	US- PGPUB ; USPAT ; USOCR ; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/2 8 16:01	
9	BRS	L9	257	"stoneley wave"	US- PGPUB ; USPAT ; USOCR ; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/2 8 16:02	
10	BRS	L10	34	"stoneley wave" not borehole	US- PGPUB ; USPAT ; USOCR ; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/2 8 16:16	

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
11	BRS	L11	55	boundary adj3 wave and (linbo3 or "lithium niobate")	US- PGPUB ; USPAT ; USOCR ; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/2 8 16:17	
12	BRS	L12	1	boundary adj3 wave and (linbo3 or "lithium niobate") and euler	US- PGPUB ; USPAT ; USOCR ; FPRS; EPO; JPO; DERWE NT; IBM_T DB	2007/08/2 8 16:17	

Searching PAJ

[MENU](#)[NEWS](#)[HELP](#)

Search Results : 4

[Index Indication](#)[Clear](#)**Text Search**

If you want to conduct a Number Search, please click on
the button to the right.

[Number Search](#)**Applicant, Title of invention, Abstract** --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

[AND](#)

AND

[AND](#)

AND

[AND](#)

AND

Date of publication of application --- e.g. 19980401 - 19980405 -

AND

IPC --- e.g. D01B7/04 A01C11/02

If you use the OR operation, please leave a SPACE between keywords.

[Search](#)[Stored data](#)

Searching PAJ

MENU**NEWS****HELP**

Search Results : 5

Index Indication

Clear

Text SearchIf you want to conduct a Number Search, please click on
the button to the right.

Number Search

Applicant, Title of invention, Abstract --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

lithium niobate

AND

AND

euler

AND

AND

AND

AND

Date of publication of application --- e.g. 19980401 - 19980405

AND

IPC --- e.g. D01B7/04 A01C11/02

If you use the OR operation, please leave a SPACE between keywords.

Search

Stored data

Searching PAJ

[MENU](#)[NEWS](#)[HELP](#)

Search Results : 4

[Index Indication](#)[Clear](#)**Text Search**

If you want to conduct a Number Search, please click on
the button to the right.

[Number Search](#)**Applicant, Title of invention, Abstract** --- e.g. computer semiconductor

If you use the AND/OR operation, please leave a SPACE between keywords.

One letter word or Stopwords are not searchable.

[AND](#)

AND

[AND](#)

AND

[AND](#)

AND

Date of publication of application --- e.g. 19980401 - 19980405 -

AND

IPC --- e.g. D01B7/04 A01C11/02

If you use the OR operation, please leave a SPACE between keywords.

[Search](#)[Stored data](#)

RESULT LIST

7 results found in the Worldwide database for:

acoustic in the title AND **"lithium niobate"** and **euler** in the title or abstract

(Results are sorted by date of upload in database)

- 1 Surface acoustic wave devices using optimized cuts of lithium niobate (LiNbO₃)**
Inventor: NAUMENKO NATALYA F (RU); ABBOTT BENJAMIN P (US)
EC: H03H9/02S2B
Publication info: **US2003080831** - 2003-05-01
Applicant:
IPC: **H03H9/02; H03H9/02**; (IPC1-7): H03H9/64
- 2 SURFACE ACOUSTIC WAVE ELEMENT**
Inventor: SHIMIZU YASUTAKA; NISHIKATA ATSUHIRO; Applicant: SHIMIZU YASUTAKA; SANYO ELECTRIC CO (+1)
EC:
Publication info: **JP9331229** - 1997-12-22
IPC: **H03H9/25; H03H9/00**; (IPC1-7): H03H9/25
- 3 SURFACE ACOUSTIC WAVE ELEMENT AND PORTABLE TELEPHONE SET USING THE SAME**
Inventor: SHIMIZU YASUTAKA (JP); NISHIKATA ATSUHIRO; (+1)
EC: H03H9/02S2B
Publication info: **WO9733368** - 1997-09-12
Applicant: SANYO ELECTRIC CO (JP); SHIMIZU YASUTAKA (JP)
IPC: **H03H9/02; H03H9/02**; (IPC1-7): H03H9/145 (+2)
- 4 SURFACE ACOUSTIC WAVE FILTER**
Inventor: MATSUI KUNIYUKI; HIRAO YASUHIRO; (+6)
EC:
Publication info: **JP8340234** - 1996-12-24
Applicant: SANYO ELECTRIC CO; SHIMIZU YASUTAKA
IPC: **H03H9/25; H03H9/64; H03H9/00** (+2)
- 5 SURFACE ACOUSTIC WAVE FILTER**
Inventor: MATSUI KUNIYUKI; HIRAO YASUHIRO; (+6)
EC: H03H9/64E3
Publication info: **JP8340232** - 1996-12-24
Applicant: SANYO ELECTRIC CO (JP); SHIMIZU YASUTAKA (JP)
IPC: **H03H9/25; H03H9/64; H03H9/02** (+4)
- 6 SURFACE ACOUSTIC WAVE ELEMENT**
Inventor: SHIMIZU YASUTAKA; NISHIKATA ATSUHIRO; Applicant: SHIMIZU YASUTAKA; SANYO ELECTRIC CO (+1)
EC:
Publication info: **JP8316781** - 1996-11-29
IPC: **H03H9/25; H03H9/00**; (IPC1-7): H03H9/25
- 7 SURFACE ACOUSTIC WAVE ELEMENT**
Inventor: KOBAYASHI TAIZO; MATSUI KUNIYUKI; (+6)
EC: H03H9/02S2B; H03H9/02S8B
Publication info: **JP8288788** - 1996-11-01
Applicant: SANYO ELECTRIC CO; SHIMIZU YASUTAKA
IPC: **H03H3/08; H03H9/02; H03H9/145** (+8)

Data supplied from the esp@cenet database - Worldwide

RESULT LIST

4 results found in the Worldwide database for:
boundary and wave and euler in the title or abstract
(Results are sorted by date of upload in database)

1 ELASTIC BOUNDARY WAVE ELEMENT

Inventor: YAMADA AKINORI

Applicant: SEIKO EPSON CORP

EC:

IPC: **H03H9/25; H03H9/00**Publication info: **JP2007053670** - 2007-03-01**2 ELASTIC BOUNDARY WAVE ELEMENT**

Inventor: YAMADA AKINORI

Applicant: SEIKO EPSON CORP

EC:

IPC: **H03H9/25; H03H9/00**Publication info: **JP2007049482** - 2007-02-22**3 ELASTIC BOUNDARY WAVE APPARATUS**

Inventor: SHINDO HAJIME

Applicant: MURATA MANUFACTURING CO

EC:

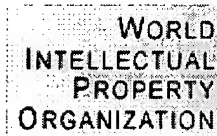
IPC: **H03H9/145; H03H9/25; H03H9/145** (+1)Publication info: **JP2007036344** - 2007-02-08**4 Method for providing a piezoelectric substrate and surface acoustic wave device with reduced bulk acoustic wave scattering**

Inventor: PENUNURI DAVID (US)

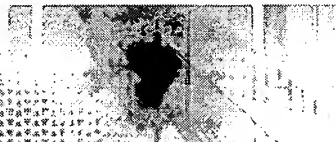
Applicant: MOTOROLA INC (US)

EC: **H03H3/08; H03H9/02S2B**IPC: **H04R17/00; H01L41/09; H01L41/22** (+13)Publication info: **US5896636** - 1999-04-27

Data supplied from the **esp@cenet** database - Worldwide



IP SERVICES



[Home](#) [IP Services](#) [PatentScope](#) [PatentScope](#)

Results of searching in PCT for:

"stoneley wave" and euler and boundary and (linbo3 or "lithium niobate"); 0 records

[\[Search Summary\]](#)

Refine Search

"stoneley wave" and euler and boundary and (linbo3 or



No records matching your query found in PCT

Search Summary



"stoneley wave": 559 occurrences in 33 records.

euler: 4554 occurrences in 1218 records.

("stoneley wave" AND euler): 1 record.

boundary: 299495 occurrences in 52106 records..

((("stoneley wave" AND euler) AND boundary): 1 record.

linbo3: 1867 occurrences in 782 records.

"lithium niobate": 6752 occurrences in 1804 records.

(linbo3 OR "lithium niobate"): 2269 records.

((("stoneley wave" AND euler) AND boundary) AND (linbo3 OR "lithium niobate")): 0 records.

Search Time: 8.06 seconds.





IP SERVICES


[Home](#) [IP Services](#) [PatentScope](#) [PatentScope](#)
Results of searching in PCT for:

("stoneley wave" or boundary) and euler and (linbo3 or "lithium niobate"): 3 records

Showing records 1 to 3 of 3 :

[\[Search Summary\]](#)**Refine Search**

("stoneley wave" or boundary) and euler and (linbo3 or



- | Title | Pub. Date | Int. Class | App. Num | Applicant |
|---|------------|------------|-------------------|--------------------|
| 1. <u>(WO 2004/006431) SAW FILTER DEVICE AND METHOD EMPLOYING NORMAL TEMPERATURE BONDING FOR PRODUCING DESIRABLE FILTER PRODUCTION AND PERFORMANCE CHARACTERISTICS</u> | 15.01.2004 | H03H 9/02 | PCT/US2003/018143 | SAWTEK, INC. |
| <p>A SAW filter (10) includes a piezoelectric substrate (16) of Lithium Niobate or optionally Lithium Tantalate having a thickness of at least twice an acoustic wavelength. The piezoelectric substrate (16) is bonded to a surrogate substrate (18) of a silicon material. The surrogate substrate (18) is characterized by a resistivity of at least 100 ohm-cm and an expansion coefficient compatible with the piezoelectric substrate (16). A catalytic bonding film (20) between the piezoelectric substrate (16) and the surrogate substrate (18) is formed from a first catalytic bonding film deposited onto a surface of the piezoelectric substrate (16) and a second catalytic bonding film deposited onto a surface of the surrogate substrate (18). The piezoelect...</p> | | | | |
| 2. <u>(WO 2004/004119) SINGLE CRYSTAL SUBSTRATE AND CUTTING METHOD THEREOF</u> | 08.01.2004 | H03H 9/02 | PCT/KR2003/001239 | LG INNOTEK CO.,LTD |
| <p>Disclosed is a single crystal substrate and a cutting method thereof. A single crystal substrate includes a langasite substrate with a SAW propagation surface; and input and output IDTs having electrodes on the surface for launching and/or detecting surface acoustic waves, wherein a direction of surface wave propagation is parallel to an X'-axis, and the substrate further has an Z'-axis perpendicular to the surface and a Y'-axis parallel to the surface and perpendicular to the X'-axis, the langasite substrate having a crystal orientation defined by modified axes X, Y and Z, the relative orientation of axes X', Y' and Z' being defined by Euler angles \sim, δ and γ, in which \sim is in a range of $8^\circ \leq \sim \leq 25^\circ$, δ is i...</p> | | | | |
| 3. <u>(WO 2002/019522) SURFACE ACOUSTIC WAVE DEVICES USING NON-SYMMETRIC OPTIMIZED CUTS OF A PIEZOELECTRIC SUBSTRATE</u> | 07.03.2002 | H03H 9/02 | PCT/US2001/014347 | SAWTEK INC. |
| <p>A surface acoustic wave device includes a piezoelectric substrate of a single crystal LiTaO_3 and an electrode pattern provided on a surface of the piezoelectric substrate which forms a resonator having an electrode thickness in a range of about 1 % to about 15 % of an acoustic wavelength of a surface acoustic wave excited on the surface of the substrate. The piezoelectric substrate has non-symmetric orientation defined by Euler angles ($\\$g(l)$, $\\$g(m)$, $\\$g(u)$), with angle $\\$g(l)$ in a range from -4° to $+4^\circ$, angle $\\$g(m)$ in a range from about -52° to about -36°, and angle $\\$g(u)$ in a range from about $(-1.365 \\$g(l) - 4)^\circ$ to $(-1.365 \\$g(l) + 4)^\circ$. Such orientations simultaneously combined with an optimized propagation loss at resonant and anti-re...</p> | | | | |

Search Summary**"stoneley wave"**: 559 occurrences in 33 records.**boundary**: 299495 occurrences in 52106 records.

("stoneley wave" OR boundary): 52116 records.

euler: 4554 occurrences in 1218 records.

(("stoneley wave" OR boundary) AND euler): 273 records.

linbo3: 1867 occurrences in 782 records.**"lithium niobate"**: 6752 occurrences in 1804 records.



Canadian Intellectual
Property Office

Office de la propriété
intellectuelle du Canada

Canada

Français
Strategis

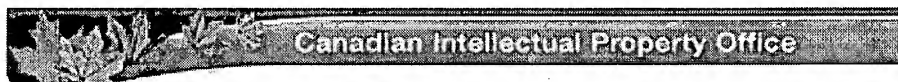
Contact Us
Site Map

Help
What's New

Search
About Us

Canada Site
Registration

strategis.gc.ca



[CIPO Home](#)

[Patents Main Page](#)

**PATENTS
DATABASE**

[Search Options](#)

[Basic](#)

[Number](#)

[Boolean](#)

[Advanced](#)

[Help](#)

[Content](#)

[Searching](#)

[Search Language](#)

[FAQ](#)

[Disclaimer](#)

[Foreign Patent Links](#)

[Decisions of the
Commissioner of
Patents](#)

[Trade-marks
Database](#)

[Copyrights Database](#)

[Industrial Designs
Database](#)

Canadian Patents Database

Search Results 08/28/2007 - 16:24:52

Search

Query :

((boundary or stoneley)) <AND> (((e

Query: ((boundary or stoneley)) <AND> (((euler)) <in> abstract) <AND>
(((linbo3 or "lithium niobate")) <in> claims)

**Sorry, no patents were found matching your
query**

Please modify your query and try again. [Example queries](#) and [search
language help](#) are available.

[Important Notices](#)